



Department of Energy

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Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

RESPONSE TO COMMENTS ON DRAFT FINAL DECISION METHODOLOGY FOR FERNALD MATERIAL DISPOSITION ALTERNATIVES

Thank you for your comments on the *Decision Methodology for Fernald Scrap Metal Disposition Alternatives*, which has been renamed *Decision Methodology for Fernald Material Disposition Alternatives*. Over the last several months, the Department of Energy Fernald Environmental Management Project (DOE-FEMP) has revised the document to simplify the application of the methodology for future decontamination and dismantlement projects and reflect stakeholder comments received to date. The revised methodology, as well as a one-page summary of the major changes and DOE-FEMP's response to stakeholder comments, are enclosed.

The DOE-FEMP has placed copies of the draft final document, comment response package, and summary of changes in the Public Environmental Information Center, and is planning a community roundtable in June 1997 to discuss the changes with stakeholders. More information on the roundtable will be announced at a later date. Stakeholders may submit comments on the revised document to Gary Stegner, DOE-FEMP Public Information, through June 30, 1997.

The methodology is intended to be a "living" document to reflect innovative technologies, new information, and stakeholder input throughout the cleanup of the FEMP. If you have any questions on the methodology or would like to discuss DOE-FEMP's responses to the comments, please contact Gary Stegner at (513) 648-3153.

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Yerace

Enclosure: As Stated

cc w/enc:

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**RESPONSE TO COMMENTS
FROM OHIO EPA AND LOCAL PUBLIC STAKEHOLDERS
ON DECISION METHODOLOGY FOR FERNALD
MATERIAL DISPOSITION ALTERNATIVES**

Comment: The scope of this methodology has been limited to scrap metals only. In fact, only two metals are specifically mentioned, steel and lead. To what if any extent will this decision methodology be extended to other materials such as scrap copper, stainless steel, concrete and similar wastes.

Response: The methodology has been revised to satisfy this comment. See the May 8, 1997 Draft-Final Methodology title page, in which "Scrap Metal" has been replaced with "Material." Also note the first paragraph of the Executive Summary, which states "The basic methodology approach is generally applicable to evaluate the disposition of most any type of material generated by remediation of most any DOE site". These changes, and others throughout the text, reinforce the intention of DOE-FEMP that the methodology be applicable to other materials, including those mentioned in the comment.

Comment: Is this decision methodology consistent with DOE national policy? The Ohio EPA has had an outstanding request for a copy of the national policy for quite some time.

Response: The decision methodology is consistent with the DOE "Policy on Recycling Radioactively Contaminated Carbon Steel" (dated September 20, 1996), which is available in the PEIC, and other DOE initiatives.

Comment: Section 4.1.1 discusses the criterion net present value. The Ohio EPA agrees that hidden costs in overhead accounts must be extracted and assigned to the appropriate alternative. Conversely hidden liabilities must also be estimated. In the example discussed in the third paragraph of this section, incremental costs associated with disposal of metal in the OSDF are mentioned. How can these incremental costs be estimated? In response to similar questions regarding incremental costs associated with disposing of a unit volume of monolithic concrete, Ohio EPA was told that there was in fact no incremental cost increase associated with the disposal of bulk objects. This response is counter intuitive.

Response: These estimates will be based on historical experience and engineering design. For example, based on historical experience and engineering design of the disposal cell, it is expected that the unit cost for disposal of structural steel will be greater than the unit cost for disposal of soil. This is because of the increased labor required for placement of the metal and compaction of the soil around the metal. Please note that the May 8, 1997 Draft-Final Methodology defines Total Cost in Section 3.1 as "...the total of all financial

costs and benefits that are paid or received by the DOE and that can be directly attributed to the implementation of a specific disposition alternative."

Comment: Section 5.2 discusses "Structured Multiattribute decision making approaches". The Ohio EPA agrees that the progressive articulation of preferences method is open to criticism because it is open to manipulation. One solution to this problem was to use interactive search methods as mentioned in the last sentence of the third paragraph on page 22. However, the use of interactive search methods was not further discussed. Considering the inherent problems with progressive methods, a more thorough discussion of interactive search methods seems appropriate.

Response: The Methodology has been revised to identify the specific decision technique (multiattribute decision analysis with supporting sensitivity analysis and identification of crossover points). See Section 2.3 "Decision Phase" of the Draft-Final Methodology for a thorough discussion of these methods.

Comment: The last sentence of Section 5.2 concludes that the analytical hierarchy process (AHP) is open to criticism because it produces inconsistent results. Is the Ohio EPA correct in inferring that either multiattribute value theory (MAVT) or multiattribute utility theory (MAUT) are therefore the preferred methods? If this is the case, please discuss the phrase "decision maker risk attitudes" which distinguishes the two theories. The phrase appears at the top of page 23 and is not discussed further.

Response: The Methodology has been revised to address this comment. The Decision Phase and the specific techniques utilized are thoroughly discussed in Section 2.3 of the Draft-Final Methodology.

Comment: The Ohio EPA agrees with the first paragraph of Section 6 which concludes that this methodology should be applied to the entire FEMP site and also to the entire DOE complex.

Response: We concur. The Methodology has been revised to reinforce this intent.

Comment: Think Recycle or Reuse in every possible way before disposal.

Response: DOE-FEMP is committed to continually evaluate recycle/reuse options for materials generated from FEMP remediation activities, and this Methodology is the primary tool for doing this. The Methodology has been revised to better reflect how this will be accomplished. In addition, pursuant to various stakeholder concerns regarding the issue of when it would be too costly to recycle, a 25% screen on cost (cost "threshold") has been incorporated. See Section 2.1 of the Draft-Final Methodology for a thorough discussion of the Threshold Phase.

Comment: Looking into an onsite disposal cell the discussion pertained to only soil, construction waste (i.e., cement, bricks, broken concrete), and small items. NO BULK.

Response: The Methodology has been revised to address this comment as follows: "Per the FEMP OU3 Final ROD, the selected final remedial action for the majority of OU3 radiologically contaminated material, including scrap structural steel, is placement in the OSDF." However, the Methodology also states "The OU3 ROD also recognized that recycling or reuse alternatives may become competitive with the ROD remedy (OSDF placement) in the future (due to changes in comparative costs or the availability of breakthrough technologies) and committed DOE to evaluate alternatives to OSDF placement."

Comment: No large machinery, bull dozers, trucks or items that must be surrounded with a foam like material.

Response: "Category 5" material will be addressed separately in an upcoming public meeting.

Comment: I would like to see FERMCO (FDF) and DOE follow the policy of Recycle or Reuse first and Disposal last. This possibility could result in a reduction of the size of the disposal cell.

Response: See response to similar comment above.

Comment: Too much "manager talk." The long sentences and technical terms make the document difficult to follow and obscure the meaning of these two sections.

Response: The Methodology has been revised to address this comment. The Draft-Final Methodology has been made more "user-friendly" than the previous Draft by thoroughly explaining the technical terms and defining the Decision Phase and score choices in plain language. The overall length of the Methodology has been reduced by over 50% so that it is less complicated and more "user-friendly."

Comment: Section 3 is easier to understand and is more user-friendly.

Response: The Methodology has been revised to make the entire document more user-friendly.

Comment: Page 8, third bullet. Considering alternatives only on the basis of current technology may not be a good idea. Breakthrough technology may be in the pipeline which could justify delaying activities until the technology is fielded.

Response: The Methodology has been revised to address this comment. As stated in the Introduction (Section 1) of the Draft-Final Methodology, "The OU3 ROD also recognized that recycling or reuse alternatives may become competitive with the ROD remedy (OSDF placement) in the future (due to changes in comparative costs or the availability of breakthrough technologies) and committed DOE to evaluate alternatives to OSDF placement.

Comment: Page 20. LCA needs to be spelled out in the title of the paragraph.

Response: In the revised Methodology, LCA is spelled out and discussed in Section 2.

Comment: Attachment, Page 35. Consultation with the Fernald Citizens Task Force should be mentioned in the discussion dealing with socio-economic analysis.

Response: The CTF has been, and will continue to be, consulted on all current and future applications of the entire Methodology (not only the socio-economic aspects).